



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,139	01/24/2005	Arnold Keller	246472007300	9203

25227 7590 08/22/2006

MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 300  
MCLEAN, VA 22102

EXAMINER
----------

SWEET, THOMAS

ART UNIT	PAPER NUMBER
----------	--------------

3738

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,139	<b>Applicant(s)</b> KELLER, ARNOLD <span style="float: right;">C</span>	
	<b>Examiner</b> Thomas J. Sweet	<b>Art Unit</b> 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4 and 5 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,2,4 and 5 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 01/24/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see page 4, filed 06/19/2006, with respect to claims 3 and 6 have been fully considered and are persuasive. The rejections of claims 3 and 6 have been withdrawn.

Applicant's arguments, see page 4, filed 06/19/2006, with respect to claims 3 and 6 have been fully considered and are persuasive. The objection of drawings regarding claims 3 and 6 has been withdrawn.

Applicant's arguments, see page 4, filed 06/19/2006, with respect to priority have been fully considered and are persuasive. The objection of priority has been withdrawn.

Applicant's arguments filed 06/19/2006 have been fully considered but they are not persuasive. With regard to the drawings, the identified figures (4 and 5) do not shown the features as claimed. There are upward sloped surfaces at 16 and 17 but, the figure does not show the configuration claimed since, the normal area can not be identified with the tibial portion rotated as shown in the drawings. Additionally, though there is a curvature shown a 5 in figure 1 nothing in the figure identifies a constant radius of curvature.

With regard to the Kaufer et al prior art rejection, applicant is likening firm support provided by the intimately nesting of the condyles with the concave surfaces as anti rotation, which is not the case since the connection between the components is gimbaled which inherently allows rotation and as in the current invention the condyles would ramp up the concave surface upon rotation.

With regard to the Crabtree et al prior art rejection, likening Crabtree et al to Kaufer et al is an unsupported argument.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “in front of the areas of normal contact, sloping upward” and “sloping upward behind the areas of normal contact” (claim 1), and “condylar sliding surface ... has a radius of curvature that is substantially constant in the flexion plane” (claim 4-5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner suggests showing a figure similar to figure 1 but flexed while in anteroposterior alignment, the “areas” should be identified by marking demarcation between each of the “areas” and the “radius of curvature” should be identified by a radius line and the angle through which it extends.

The drawings are objected to because figure 3 is a cross section unidentified in another figure (for example, a cut away at 21 in figure 2).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet”

Art Unit: 3738

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaufer et al. (US 3,868,730). Kaufer et al. discloses a knee prosthesis (all figs.), comprising a femoral prosthetic part (at 16) which forms a pair of condylar sliding surfaces (at 22, in figs. 2 and 3), with a tibial part (at 18) which has tibial sliding surfaces (at 38) configured for cooperating with the condylar sliding surfaces (as shown in the figs), and a coupling part (at 44) which connects the femoral and tibial parts, so that they are full capable of rotate about a rotation axis (thru 44) approximately parallel to a tibial shaft (approximately thru 48) when implanted (the ball 34 allows rotation around many axes, including the one thru 44), wherein the tibial sliding surfaces having areas of normal contact (such as shown in fig. 5) which, when the femoral and tibial parts have the same anteroposterior alignment (as in fig. 5), cooperate with corresponding condylar sliding surfaces, and wherein the tibial sliding surfaces have first further areas (at the gap

Art Unit: 3738

between the condylar and tibial surfaces to the right in fig. 5) in front of the areas of normal contact sloping upward (as seen in fig. 5) with a radius of curvature much greater than the radius of curvature of the portion of the corresponding condylar sliding surface (col 3, lines 19-31 and the abs.- describe the curvature of 38 corresponding to the lower condyle runner which is of greater radius than the upper condyle runner contacting the tibial portion in fig. 5) cooperating with the tibial sliding surface (as shown) and second further areas (at the gap between the condylar and tibial surfaces to the left in fig. 5) sloping upward behind the areas of normal contact (as shown in fig. 5), the first and second further areas being configured relative to the areas of normal contact which is fully capable, in the event of rotation of the tibial part of the prosthesis relative to the femoral part about the rotation axis when implanted each of the condylar sliding surfaces (at 22) remains in contact the first or second further area of with its corresponding associated tibial sliding surface (at 38) during the rotation (i.e. ramp up the tibial surface).

With regard to claim 4, a portion (the upper condyle runner) of the condylar sliding surface corresponding to the tibial sliding surface has a radius of curvature that is substantially constant in the flexion plane (abs).

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Crabtree et al. (US PGpub 2005/0107886). Crabtree et al. discloses a knee prosthesis (all figs.), comprising a femoral prosthetic part (at 100) which forms a pair of condylar sliding surfaces (at 102), with a tibial part (at 200) which has tibial sliding surfaces (at 302) configured for cooperating with the condylar sliding surfaces (as shown in the figs), and a coupling part (at 400) which connects the femoral and tibial parts, so that they are full capable of rotate about a rotation

Art Unit: 3738

axis (thru 210) approximately parallel to a tibial shaft (approximately thru 208) when implanted, wherein the tibial sliding surfaces having areas of normal contact (such as shown in figs. 6A-6B) which, when the femoral and tibial parts, have the same anteroposterior alignment (as in figs. 6A-6B), cooperate with corresponding condylar sliding surfaces (at 102), and wherein the tibial sliding surfaces have first further areas (at the gap between the condylar and tibial surfaces to the right in fig. 6B) in front of the areas of normal contact sloping upward (as seen in fig. 6B) with a radius of curvature much greater than the radius of curvature of the portion of the corresponding condylar sliding surface ([0030] and [0033] - describe the curvature of 302 corresponding condyles as shown in the figs., [0033] and the condyles have at least two radii, the greater radius at the posterior verses the distal condyles [0030]) cooperating with the tibial sliding surface (as shown) and second further areas (at the gap between the condylar and tibial surfaces to the left in fig. 6A) sloping upward behind the areas of normal contact (as shown in fig. 6A), the first and second further areas being configured relative to the areas of normal contact which is fully capable, in the event of rotation of the tibial part of the prosthesis relative to the femoral part about the rotation axis when implanted each of the condylar sliding surfaces (at 102) remains in contact the first or second further area of with its corresponding associated tibial sliding surface (at 302) during the rotation (i.e. ramp up the tibial surface).

With regard to claim 2, the rotation axis is fixed (thru 210) in relation to the femoral and tibial prosthesis parts, in an anteroposterior direction.

With regard to claims 4 and 5, the condylar sliding surface corresponding to the tibial sliding surface has a radius of curvature that is substantially constant in the flexion plane.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Sweet whose telephone number is 571-272-4761. The examiner can normally be reached on 6:30 am - 5:00pm, M-Th.

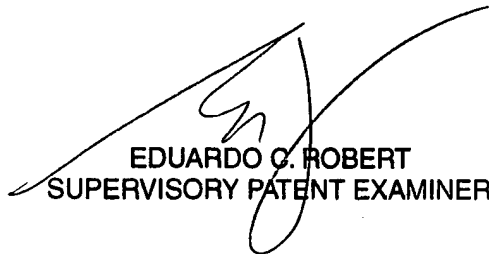
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine M. McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3738

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tjs



EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER